

Peter Raimondi, Ph.D. Professor at UC Santa Cruz, Panel Chair

Peter Raimondi's research interests include both basic and applied ecological problems including: The contribution of oceanographic forcing, propagule dispersal and post-settlement mechanisms to the development of benthic communities; patterns, mechanisms and consequences of self-fertilization in organisms with short range dispersal and complex life histories, mechanisms affecting stability of marine biological communities; the importance of anthropogenic perturbations to community development and organization; and the patterns of social use and population structure of harvested species in the Gulf of California.

In addition to these research themes Peter also currently serves on advisory panels to the Federal Government (National Marine Sanctuary) State of California (California Fish and Game, California Coastal Commission, the Regional Water Quality Board and the California Energy Commission). Peter's charge is to oversee design and analyses of: 1) monitoring programs to detect impacts from the operation of existing and proposed new units at coastal power plants (Potrero, Moss Landing, Morro Bay, Diablo Canyon, Huntington Beach, and San Onofre from North to South) and 2) mitigation and monitoring programs required to compensate for impacts to the marine environment (Moss Landing, Morro Bay, Diablo Canyon and San Onofre).

Peter holds a B.A. (1976) in Philosophy from Northern Arizona University and a Ph.D. (1988) in Biology from UC Santa Barbara

Barry Noon, Ph.D., Professor at Colorado State University, Panel Lead Author

Barry R. Noon is a professor in the Department of Fish, Wildlife, and Conservation Biology at Colorado State University. In collaboration with many outstanding students and post-docs, he has conducted research on the effects of land management practices on wildlife populations for the past 40 years. His focus has primarily been on the conservation of imperiled species in forest ecosystems. During this period, he has published over 120 scientific papers and co-authored 4 book-length reports to the federal government on the sustainable management of public lands. For 11 years, he directed a Forest Service Research Lab in the Pacific Northwest (USA) and in 1995 served as Chief Scientist of the National Biological Service, Department of the Interior. During the last 15 years, he has served on federal advisory committees providing recommendations to the Secretary of Agriculture on the management of Forest Service lands to better sustain biological diversity and to the Secretary of the Interior on changes to the Endangered Species Act to encourage conservation on private lands. He has also served as chair of the global policy committee for the Society for Conservation Biology and provided testimony to the U.S. Congress on numerous occasions on issues regarding the conservation of wildlife in the U.S. and internationally. Dr. Noon has received several academic awards including the Edward T. LaRoe award from the Society for Conservation Biology (1997), an Aldo Leopold Leadership Fellowship (2004), Colorado State University Distinguished Ecologist (2008-09), and two Senior Fulbright Fellowships to India from the U.S. State Department (2003-04 and 2010-11). In collaboration with his students, his current research focuses on tiger conservation in India, the effects of energy development on imperiled species in the United States, climate change effects on wetland birds, and promoting biodiversity conservation on U.S. Department of Defense lands.

Dr. Noon holds a B.S. (1971) in Biology from Princeton University and a Ph.D. (1977) in Ecology from the State University of New York-Albany.

Allan Steven-Oaten, Ph.D., Professor Emeritus, UC Santa Barbara

Allan Stewart-Oaten is Emeritus Professor of Mathematical Biology, in the Department of Ecology, Evolution and Marine Biology at the University of California, Santa Barbara. His main work is in statistical aspects of environmental impact assessment when data are available from before the impact, especially for local impacts when comparable nearby sites exist. Other work is in statistics (e.g., estimation of abundance, the role of assumptions in inference), probability (e.g., models of foraging under uncertainty) and mathematics (e.g., models of interacting populations). He is currently working on a problem in demography, and mentors community college transfers studying mathematics at UCSB.

Dr. Stewart-Oaten holds a B.A. (1961) in English and Pure Mathematics from the University of Melbourne, Australia, and a M.S. (1967) in Mathematical Statistics and a Ph.D. (1969) in Mathematical Statistics from Michigan State University.

Laura Valoppi, South Bay Salt Pond Restoration Lead Scientist

Laura Valoppi is Lead Scientist for the South Bay Salt Pond Restoration Project. Laura works with researchers and managers on promoting and organizing discipline-specific, multi-disciplinary, as well as, integrated scientific monitoring and applied studies throughout the San Francisco Bay Salt Pond Restoration Project area. She provides the leadership to foster collaboration for all science activities. She is responsible for providing leadership in strategic planning, coordination, and

management of all scientific programs and activities related to the restoration project, and developing partnerships to implement these activities with Federal, State, national and international partners. As the science manager for the San Francisco Bay Salt Pond Restoration Project she generates local, national and international interest, and local, federal and regional investment; ensures the restoration science studies are credible, legitimate and relevant; encourages the best scientists available to work on issues of interest to the restoration project; identifies and fosters funding opportunities to support the restoration. These tasks are accomplished in concert with the Project Management Team (PMT) that is comprised of State and Federal Refuge Managers and other regulatory and land management agency managers. Laura has a diverse background that includes experience related to the bay, biological resources, water quality and grants management that prepares her very well for the challenges she faces as lead scientist.

Laura holds a B.S. (1980) in Natural Resources from University of Michigan, Ann Arbor and a M.S. (1987) in Water Science from UC Davis

Michael MacWilliams, Ph.D., Anchor QEA

Dr. MacWilliams has more than twenty-one years of experience in the field of numerical modeling and seventeen years of experience in computational fluid dynamics. His primary field of study is the application of state-of-the-art three-dimensional numerical models to environmental flows. His Ph.D. research focused on the application of detailed three-dimensional hydrodynamic models to flow in river channels and on floodplains. In addition, Dr. MacWilliams has fourteen years of experience working as an environmental consultant using three-dimensional hydrodynamic models in estuarine systems. This work includes conducting detailed hydrodynamic and salinity modeling related to a large-scale restoration project of salt ponds in San Francisco Bay and hydrodynamic and salinity modeling in Suisun Bay to investigate the potential mechanisms underlying the relationships of fish abundance to flow, "Fish-X2," which form the basis for the current salinity standard for the San Francisco estuary.

Dr. MacWilliams is the primary developer of the [UnTRIM San Francisco Bay-Delta model](#), a three-dimensional hydrodynamic model of San Francisco Bay, which has been used in studies of San Francisco Bay and the Sacramento-San Joaquin Delta for California DWR, USBR, USGS, and the US Army Corps of Engineers. Recent projects include the application of the UnTRIM model to San Francisco Bay and the Sacramento-San Joaquin Delta to assess potential impacts of sea level rise, Delta levee failures, the effects of Delta operations on delta smelt entrainment, and the potential water quality impacts of deepening the Sacramento and San Francisco Bay to Stockton Deep Water Ship Channels.

Dr. MacWilliams holds a B.A. (1997) in English and B.S. (1997) in Engineering and Environmental Science from University of Notre Dame and a M.S. (1998) in Civil and Environmental Engineering and a Ph.D. (2004) in Environmental Fluid Mechanics & Hydrology with a Ph.D. Minor in Geological and Environmental Science from Stanford University.